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**SPECIFICATIONS AND OTHER STANDARDIZATION DOCUMENTS
INVOLVING CELLULAR PLASTICS (PLASTIC FOAMS),
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JULY 1976

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20. ABSTRACT (Continued)

Laboratories (UL) Standards, National Fire Protection Association (NFPA) Standards, and National Bureau of Standards Voluntary Product Standards and Simplified Practice Recommendations. A subject index is provided.

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**SPECIFICATIONS AND OTHER STANDARDIZATION DOCUMENTS
INVOLVING CELLULAR PLASTICS (PLASTIC FOAMS), CUSHIONING
AND RELATED MATERIALS**

by

ARTHUR H. LANDROCK

JULY 1976

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DISCLAIMER

In this compilation PLASTEC has attempted to list all standardization documents known to be relevant to cellular plastics and related materials. It is recognized, however, that there must necessarily be some omissions, and for this the author apologizes.

ABSTRACT

This is a compilation of all known U.S. specifications and other standardization documents involving cellular plastics (plastic foams), cushioning materials, and related materials, including cellular rubbers. A total of 286 documents covered include ASTM Specifications and Standards, Military Specifications, Standards and Handbooks, Federal Specifications, Federal Test Method Standards, Society of Automotive Engineers (SAE) Aerospace Materials Specifications (AMS's) and SAE Recommended Practices, Underwriters Laboratories (UL) Standards, National Fire Protection Association (NFPA) Standards, and National Bureau of Standards Voluntary Product Standards and Simplified Practice Recommendations. A subject index is provided.

SCOPE AND NOTES

This Note is intended as a compilation of all known United States specification and other standardization documents involving cellular plastics (plastic foams), cushioning materials, and related materials, including cellular rubbers. Documents covered include ASTM Specifications and Standards, Military Specifications, Military Standards, Military Handbooks, Federal Specifications, Federal Test Method Standards, Society of Automotive Engineers Aerospace Materials Specifications and SAE Recommended Practices, Underwriters Laboratories Standards, National Fire Protection Association Standards and National Bureau of Standards Voluntary Product Standards and Simplified Practice Recommendations.

A total of 286 documents are listed. In the case of the ASTM specifications and standards, documents selected for listing include 1. standards known to be specific to cellular plastics and related materials and 2. standards not specific to cellular plastics, but which have been listed because they may be used for cellular plastics and similar materials. The other sources list only documents specific to cellular plastics or rubbers and closely related materials. A subject index is included to assist the reader in finding relevant specifications, standards, and other documents.

In the case of ASTM documents the Parts (volumes) in which the standards are published are listed with the entries. Military documents include Federal Supply Classification (FSC) listings or DoD Area Assignments, designations of the preparing activity, issue date of the latest revision, indication of coordination status, and of the existence of a Qualified Products List (QPL). Federal documents have similar listings, but none of those listed have QPL's nor limited coordination, and so there are no coded listings tabulated. In the case of Federal Test Method Standards, with one exception, the individual test methods are listed separately, with titles and dates of issue.

The reader who is unfamiliar with specifications and standards will find it helpful to refer to Chapter 11, "Commercial and Government Specifications and Standards," by Arthur H. Landrock and Norman E. Beach, PLASTEC, in the Handbook of Plastics and Elastomers, edited by Charles A. Harper, and published by McGraw-Hill Book Company in 1975.

The author welcomes comments on the usefulness of this Note. Suggestions as to documents that are applicable and should be added to any possible future revision would be very much appreciated.

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COMMERCIAL AND INDUSTRY SPECIFICATIONS AND STANDARDS

<u>Ref. No.</u>	<u>ASTM Specifications and Standards (140 specs & stds)</u>	
1	ASTM C 165-54 (1970)	Part 18 ¹ Standard Method of Test for COMPRESSIVE STRENGTH OF PREFORMED BLOCK-TYPE THERMAL INSULATION
2	ASTM C 168-67	Part 18 Standard Definitions of Terms Relating to THERMAL INSULATING MATERIALS
3	ASTM C 177-71	Parts 18, 35 Standard Method of Test for THERMAL CONDUCTIVITY OF MATERIALS BY MEANS OF THE GUARDED HOT PLATE
4	ASTM C 203-58 (1972)	Part 18 Standard Method of Test for BREAKING LOAD AND CALCULATED FLEXURAL STRENGTH OF PREFORMED BLOCK-TYPE THERMAL INSULATION
5	ASTM C 271-61 (1970)	Part 25 Standard Method of Test for DENSITY OF CORE MATERIALS FOR STRUCTURAL SANDWICH CONSTRUCTIONS
6	ASTM C 272-53 (1970)	Part 25 Standard Method of Test for WATER ABSORPTION OF CORE MATERIALS FOR STRUCTURAL SANDWICH CONSTRUCTIONS
7	ASTM C 273-61 (1970)	Part 25 Standard Method of SHEAR TEST IN FLATWISE PLANE OF FLAT SANDWICH CONSTRUCTIONS OR SANDWICH CORES
8	ASTM C 274-68 (1975)	Part 25 Standard Definitions of Terms Relating to STRUCTURAL SANDWICH CONSTRUCTIONS
9	ASTM C 297-61 (1970)	Part 25 Standard Method of TENSION TEST OF FLAT SANDWICH CONSTRUCTIONS IN FLATWISE PLANE
10	ASTM C 303-56 (1972)	Part 18 Standard Method of Test for DENSITY OF PREFORMED BLOCK-TYPE THERMAL INSULATION
11	ASTM C 335-75	Part 16 Standard Method of Test for THERMAL CONDUCTIVITY OF PIPE INSULATION

¹Part numbers listed refer to the current Annual Book of ASTM Standards.
"Parts" are volumes. In 1975 there were 48 Parts.

<u>Ref. No.</u>	<u>ASTM Specifications and Standards</u>	
12	ASTM C 351-61 (1973)	Part 18 Standard Method of Test for MEAN SPECIFIC HEAT OF THERMAL INSULATION
13	ASTM C 355-64 (1973)	Part 18 Standard Method of Test for WATER VAPOR TRANSMISSION OF THICK MATERIALS
14	ASTM C 356-60 (1975)	Part 18 Standard Method of Test for LINEAR SHRINKAGE OF PREFORMED HIGH-TEMPERATURE THERMAL INSULATION SUBJECTED TO SOAKING HEAT
15	ASTM C 364-61 (1970)	Part 25 Standard Method of Test for EDGEWISE COMPRESSION OF FLAT SANDWICH CONSTRUCTIONS
16	ASTM C 365-57 (1970)	Part 25 Standard Methods of Test for FLATWISE COMPRESSIVE STRENGTH OF SANDWICH CORES
17	ASTM C 366-57 (1970)	Part 25 Standard Methods for MEASUREMENT OF THICKNESS OF SANDWICH CORES
18	ASTM C 367-57 (1972)	Part 18 Standard Methods of Test for STRENGTH PROPERTIES OF PREFABRICATED ARCHITECTURAL ACOUSTICAL MATERIALS
19	ASTM C 384-58 (1972)	Part 18 Standard Method of Test for IMPEDANCE AND ABSORPTION OF ACOUSTICAL MATERIALS BY THE TUBE METHOD
20	ASTM C 393-62 (1970)	Part 25 Standard Method of FLEXURE TEST OF FLAT SANDWICH CONSTRUCTIONS
21	ASTM C 394-62 (1970)	Part 25 Standard Method of Test for SHEAR FATIGUE OF SANDWICH CORE MATERIALS
22	ASTM C 411-61 (1967)	Part 18 Standard Method of Test for HOT-SURFACE PERFORMANCE OF HIGH-TEMPERATURE THERMAL INSULATION
23	ASTM C 421-71	Part 18 Standard Method of Test for MECHANICAL STABILITY OF PREFORMED THERMAL INSULATION BY TUMBLING

<u>Ref. No.</u>	<u>ASTM Specifications and Standards</u>
24	ASTM C 423-66 (1972) Part 18 Standard Method of Test on SOUND ABSORPTION OF ACOUSTICAL MATERIALS IN REVERBERATION ROOMS
25	ASTM C 446-64 (1972) Part 18 Standard Method of Test for BREAKING LOAD AND CALCULATED MODULUS OF RUPTURE OF PREFORMED INSULATION OF PIPES
26	ASTM C 447-71 Part 18 Standard Method for ESTIMATING MAXIMUM USE TEMPERATURE OF PREFORMED THERMAL INSULATION
27	ASTM C 480-62 (1970) Part 25 Standard Method of Test for FLEXURE-CREEP OF SANDWICH CONSTRUCTION
28	ASTM C 481-62 (1970) Part 25 Standard Method of Test for LABORATORY AGING OF SANDWICH CONSTRUCTIONS
29	ASTM C 509-70 Parts 18, 38 Standard Specification for CELLULAR ELASTOMERIC PREFORMED GASKET AND SEALING MATERIALS
30	ASTM C 518-70 Parts 18, 44 Standard Method of Test for THERMAL CONDUCTIVITY OF MATERIALS BY MEANS OF THE HEAT FLOW METER
31	ASTM C 522-73 Part 18 Standard Method of Test for AIRFLOW RESISTANCE OF ACOUSTICAL MATERIALS
32	ASTM C 534-70 Part 18 Standard Specification for PREFORMED FLEXIBLE ELASTOMERIC CELLULAR THERMAL INSULATION IN SHEET AND TUBULAR FORM
33	ASTM C 548-71 Part 18 Standard Method of Test for DIMENSIONAL STABILITY OF LOW-TEMPERATURE THERMAL BLOCK AND PIPE INSULATION
34	ASTM C 569-68 (1975) Part 18 Standard Method of Test for INDENTATION HARDNESS OF PREFORMED THERMAL INSULATION
35	ASTM C 578-69 Part 18 Standard Specification for PREFORMED, BLOCK-TYPE CELLULAR POLYSTYRENE THERMAL INSULATION

<u>Ref. No.</u>	<u>ASTM Specifications and Standards</u>
36	ASTM C 589-68 Part 18 Standard Method of Test for APPARENT IMPACT STRENGTH OF PREFORMED BLOCK-TYPE INSULATING MATERIALS
37	ASTM C 591-69 Part 18 Standard Specification for RIGID PREFORMED CELLULAR URETHANE THERMAL INSULATION
38	ASTM D 149-75 Parts 35, 38, 39 Standard Methods of Test for DIELECTRIC BREAKDOWN VOLTAGE AND DIELECTRIC STRENGTH OF ELECTRICAL INSULATING MATERIALS AT COMMERCIAL POWER FREQUENCIES
39	ASTM D 150-74 Parts 35, 38, 39, 40 Standard Methods of Test for A-C LOSS CHARACTERISTICS AND DIELECTRIC CONSTANT (PERMITTIVITY) OF SOLID ELECTRICAL INSULATING MATERIALS
40	ASTM D 256-73 Part 35 Standard Methods of Test for IMPACT RESISTANCE OF PLASTICS AND ELECTRICAL INSULATING MATERIALS
41	ASTM D 257-75a Parts 35, 38, 39 Standard Methods of Test for D-C RESISTANCE OR CONDUCTANCE OF INSULATING MATERIALS
42	ASTM D 395-69 Part 37 Standard Methods of Test for COMPRESSION SET OF VULCANIZED RUBBER
43	ASTM D 412-68 Parts 35, 37 Standard Method of TENSION TESTING OF VULCANIZED RUBBER
44	ASTM D 454-53 (1970) Part 37 Standard Method of AIR-PRESSURE HEAT TEST OF VULCANIZED RUBBER
45	ASTM D 471-75 Part 37 Standard Method of Test for CHANGE IN PROPERTIES OF ELASTOMERIC VULCANIZATES RESULTING FROM IMMERSION IN LIQUIDS
46	ASTM D 531-56 (1970) Part 37 Standard Method of Test for INDENTATION OF RUBBER BY MEANS OF THE PUSEY & JONES PLASTOMETER
47	ASTM D 543-67 (1972) Part 35 Standard Method of Test for RESISTANCE OF PLASTICS TO CHEMICAL REAGENTS

<u>Ref. No.</u>	<u>ASTM Specifications and Standards</u>	
48	ASTM D 573-67 (1972)	Part 37 Standard Method of Test for ACCELERATED AGING OF VULCANIZED RUBBER BY THE OVEN METHOD
49	ASTM D 575-69	Part 37 Standard Methods of Test for COMPRESSION-DEFLECTION CHARACTERISTICS OF VULCANIZED RUBBER
50	ASTM D 618-61 (1971)	Part 35 Standard Methods of CONDITIONING PLASTICS AND ELECTRICAL INSULATING MATERIALS FOR TESTING
51	ASTM D 624-73	Part 37 Standard Method of Test for TEAR RESISTANCE OF VULCANIZED RUBBER
52	ASTM D 635-74	Part 35 Standard Method of Test for FLAMMABILITY OF SELF- SUPPORTING PLASTICS
53	ASTM D 638-72	Part 35 Standard Method of Test for TENSILE PROPERTIES OF PLASTICS
54	ASTM D 648-72	Part 35 Standard Method of Test for DEFLECTION TEMPERATURE OF PLASTICS UNDER FLEXURAL LOAD
55	ASTM D 695-69	Part 35 Standard Method of Test for COMPRESSIVE PROPERTIES OF RIGID PLASTICS
56	ASTM D 696-70	Parts 35, 44 Standard Method of Test for COEFFICIENT OF LINEAR THERMAL EXPANSION OF CELLULAR PLASTICS
57	ASTM D 732-46 (1975)	Part 35 Standard Method of Test for SHEAR STRENGTH OF PLASTICS
58	ASTM D 746-73	Parts 35, 38 Standard Method of Test for BRITTLINESS TEMPERATURE OF PLASTICS AND ELASTOMERS BY IMPACT
59	ASTM D 747-70	Part 35 Standard Method of Test for STIFFNESS OF PLASTICS BY MEANS OF A CANTILEVER BEAM

<u>Ref. No.</u>	<u>ASTM Specifications and Standards</u>	
60	ASTM D 750-68 (1974)	Part 37 Standard Recommended Practice for OPERATING LIGHT- AND WEATHER-EXPOSURE APPARATUS (CARBON-ARC TYPE) FOR ARTIFICIAL WEATHER TESTING OF RUBBER COMPOUNDS
61	ASTM D 756-56 (1971)	Part 35 Standard Methods of Test for RESISTANCE OF PLASTICS TO ACCELERATED SERVICE CONDITIONS
62	ASTM D 757-74	Part 35 Standard Method of Test for INCANDESCENCE RESISTANCE OF RIGID PLASTICS
63	ASTM D 759-66 (1970)	Part 35 Standard Recommended Practice for DETERMINING THE PHYSICAL PROPERTIES OF PLASTICS AT SUBNORMAL AND SUPERNORMAL TEMPERATURES
64	ASTM D 785-65 (1970)	Part 35 Standard Method of Test for ROCKWELL HARDNESS OF PLASTICS AND ELECTRICAL INSULATING MATERIALS
65	ASTM D 790-71	Part 35 Standard Methods of Test for FLEXURAL PROPERTIES OF PLASTICS
66	ASTM D 864-52 (1971)	Part 35 Standard Method of Test for COEFFICIENT OF CUBICAL THERMAL EXPANSION OF PLASTICS
67	ASTM D 865-62 (1974)	Part 37 Standard Method for HEAT AGING OF VULCANIZED RUBBER BY TEST TUBE METHOD
68	ASTM D 883-75a	Part 35 Standard Definitions of Terms Relating to PLASTICS
69	ASTM D 945-72	Part 37 Standard Methods of Test for MECHANICAL PROPERTIES OF ELASTOMERIC VULCANIZATES UNDER COMPRESSION OR SHEAR STRAINS BY THE MECHANICAL OSCILLOGRAPH
70	ASTM D 1042-51 (1971)	Part 35 Standard Method of Test for MEASURING CHANGES IN LINEAR DIMENSIONS OF PLASTICS
71	ASTM D 1044-73	Part 35 Standard Method of Test for RESISTANCE OF TRANSPARENT PLASTICS TO SURFACE ABRASION

<u>Ref. No.</u>	<u>ASTM Specifications and Standards</u>	
72	ASTM D 1054-66 (1972)	Part 37 Standard Method of Test for IMPACT RESILIENCE AND PENETRATION OF RUBBER BY THE REBOUND PENDULUM
73	ASTM D 1055-69 (1975)	Part 38 Standard Specification for LATEX FOAM RUBBERS
74	ASTM D 1056-73	Part 38 Standard Specification for SPONGE AND EXPANDED CELLULAR RUBBER PRODUCTS
75	ASTM D 1171-68 (1974)	Part 37 Standard Method of Test for WEATHER RESISTANCE EXPOSURE OF AUTOMOTIVE RUBBER COMPOUNDS
76	ASTM D 1229-62 (1975)	Part 37 Standard Method of Test for LOW-TEMPERATURE COMPRESSION SET OF VULCANIZED ELASTOMERS
77	ASTM D 1372-64 (1971)	Part 20 Standard Methods of Testing PACKAGE CUSHIONING MATERIALS
78	ASTM D 1242-56 (1975)	Part 35 Standard Methods of Test for RESISTANCE TO ABRASION OF PLASTIC MATERIALS
79	ASTM D 1390-62 (1968)	Part 37 Standard Method of Test for STRESS RELAXATION OF VULCANIZED RUBBER IN COMPRESSION
80	ASTM D 1415-68 (1974)	Part 37 Standard Method of Test for INTERNATIONAL HARDNESS OF VULCANIZED RUBBER
81	ASTM D 1435-69	Part 35 Standard Recommended Practice for OUTDOOR WEATHERING OF PLASTICS
82	ASTM D 1499-64 (1971)	Part 35 Standard Recommended Practice for OPERATING LIGHT- AND WATER-EXPOSURE APPARATUS (CARBON-ARC TYPE) FOR EXPOSURE OF PLASTICS
83	ASTM D 1501-71	Part 35 Standard Recommended Practice for EXPOSURE OF PLASTICS TO FLUORESCENT SUNLAMP

<u>Ref. No.</u>	<u>ASTM Specifications and Standards</u>	
84	ASTM D 1564-71	Part 38
	Standard Methods of Testing SLAB FLEXIBLE URETHANE FOAM	
85	ASTM D 1565-70	Part 38
	Standard Specification for FLEXIBLE FOAMS MADE FROM POLYMERS OR COPOLYMERS OF VINYL CHLORIDE (same as SAE Standard J 15, Ref. No. 155)	
86	ASTM D 1566-75a	Parts 37, 38
	Standard Definitions of Terms Relating to RUBBER AND RUBBER-LIKE MATERIALS	
87	ASTM D 1596-64 (1971)	Part 20
	Standard Method of Test for SHOCK ABSORBING CHARACTERISTICS OF PACKAGE CUSHIONING MATERIALS	
88	ASTM D 1621-73	Part 36
	Standard Method of Test for COMPRESSIVE PROPERTIES OF RIGID CELLULAR PLASTICS	
89	ASTM D 1622-63 (1975)	Part 36
	Standard Method of Test for APPARENT DENSITY OF RIGID CELLULAR PLASTICS	
90	ASTM D 1623-72	Part 36
	Standard Method of Test for TENSILE PROPERTIES OF RIGID CELLULAR PLASTICS	
91	ASTM D 1638-74	Parts 29, 36, 38
	Standard Methods of Testing URETHANE FOAM ISOCYANATE RAW MATERIALS	
92	ASTM D 1667-70	Part 38
	Standard Specification for SPONGE MADE FROM CLOSED-CELL POLY(VINYL CHLORIDE), OR COPOLYMERS THEREOF	
93	ASTM D 1672-66 (1971)	Parts 35, 37
	Standard Recommended Practice for EXPOSURE OF POLYMERIC MATERIALS TO HIGH ENERGY RADIATION	
94	ASTM D 1673-73	Parts 36, 39
	Standard Methods of Test for DIELECTRIC CONSTANT AND DISSIPATION FACTOR OF EXPANDED CELLULAR PLASTICS USED FOR ELECTRICAL INSULATION	

<u>Ref. No.</u>	<u>ASTM Specifications and Standards</u>	
95	ASTM D 1692-74	Part 35 Standard Method of Test for RATE OF BURNING OR EXTENT OF BURNING OF CELLULAR PLASTICS USING A SUPPORTED SPECIMEN BY A HORIZONTAL SCREEN (<u>Note:</u> Title being changed by ASTM ballot to: RATE OF BURNING AND/OR EXTENT OF AND TIME OF BURNING OF CELLULAR PLASTICS USING A SPECIMEN SUPPORTED BY A HORIZONTAL SCREEN. This change is only a proposal and may be accepted, rejected or further modified.)
96	ASTM D 1786-73	Part 36 Standard Specification for TOLUENEDIISOCYANATE
97	ASTM D 1822-68 (1973)	Part 35 Standard Method of Test for TENSILE-IMPACT ENERGY TO BREAK PLASTICS AND ELECTRICAL INSULATING MATERIALS
98	ASTM D 1870-68 (1972)	Parts 35, 37 Standard Method of Test for ELEVATED TEMPERATURE AGING USING A CIRCULAR OVEN
99	ASTM D 1929-68 (1975)	Part 35 Standard Method of Test for IGNITION PROPERTIES OF PLASTICS
100	ASTM D 2126-75	Part 36 Standard Method of Test for RESPONSE OF RIGID CELLULAR PLASTICS TO THERMAL AND HUMID AGING
101	ASTM D 2128-73	Part 38 Standard Specification for RUBBERIZED CURLED HAIR
102	ASTM D 2221-68 (1973)	Part 20 Standard Method of Test for CREEP PROPERTIES OF PACKAGE CUSHIONING MATERIALS
103	ASTM D 2237-70 (1975)	Part 36 Standard Method of Test for RATE-OF-RISE (VOLUME INCREASE) PROPERTIES OF URETHANE FOAMING SYSTEMS
04	ASTM D 2240-75	Parts 35, 37 Standard Methods of Test for INDENTATION HARDNESS OF RUBBER AND PLASTICS BY MEANS OF A DUROMETER
105	ASTM D 2326-70	Part 36 Standard Method of Test for THERMAL CONDUCTIVITY OF CELLULAR PLASTICS BY MEANS OF A PROBE (<u>Note:</u> This method is in the process of being withdrawn as an ASTM standard.)

<u>Ref. No.</u>	<u>ASTM Specifications and Standards</u>	
106	ASTM D 2341-72	Part 36 Standard Specification for RIGID URETHANE FOAM
107	ASTM D 2406-73	Part 38 Standard Methods of Testing MOLDED FLEXIBLE URETHANE FOAM
108	ASTM D 2565-70	Part 35 Standard Recommended Practice for OPERATING XENON ARC-TYPE (WATER-COOLED) LIGHT- AND WATER-EXPOSURE APPARATUS FOR EXPOSURE OF PLASTICS
109	ASTM D 2648-70	Part 35 Standard Recommended Practice for MEASURING TIME-TO-FAILURE BY RUPTURE OF PLASTICS UNDER TENSION IN VARIOUS ENVIRONMENTS
110	ASTM D 2707-72	Part 37 Standard Method of Test for TENSION TESTING OF HARD RUBBER
111	ASTM D 2735-72	Part 38 Standard Method of Test for EFFECT OF CYCLIC IMMERSION OF SYNTACTIC FOAM AT PRESSURE
112	ASTM D 2736-72a	Part 36 Standard Method of Test for HYDROSTATIC COMPRESSIVE STRENGTH OF SYNTACTIC FOAM
113	ASTM D 2840-69	Part 36 Standard Method of Test for AVERAGE TRUE PARTICLE DENSITY OF HOLLOW MICROSPHERES
114	ASTM D 2841-69	Part 36 Standard Method of Test for SAMPLING HOLLOW MICROSPHERES
115	ASTM D 2842-69	Part 36 Standard Method of Test for WATER ABSORPTION OF RIGID CELLULAR PLASTICS
116	ASTM D 2843-70	Part 35 Standard Method for MEASURING THE DENSITY OF SMOKE FROM THE BURNING OR DECOMPOSITION OF PLASTICS
117	ASTM D 2849-69 (1975)	Part 36 Standard Methods of Testing URETHANE FOAM POLYOL RAW MATERIALS

<u>Ref. No.</u>	<u>ASTM Specifications and Standards</u>	
118	ASTM D 2856-70	Part 36 Standard Method for MEASURING THE OPEN CELL CONTENT OF RIGID CELLULAR PLASTICS BY THE AIR PYCNOMETER
119	ASTM D 2863-74	Part 35 Standard Method of Test for FLAMMABILITY OF PLASTICS BY THE OXYGEN INDEX METHOD
120	ASTM D 2926-70	Part 36 Standard Method of Test for BULK MODULUS OF ELASTICITY OF SYNTACTIC FOAM (PISTON-CYLINDER METHOD)
121	ASTM D 2953-71	Part 35 Standard Classification System for POLYMERIC MATERIALS FOR SERVICE IN IONIZING RADIATION
122	ASTM D 3014-74	Part 35 Standard Method of Test for FLAMMABILITY OF RIGID CELLULAR PLASTICS
123	ASTM D 3045-74	Part 35 Standard Recommended Practice for HEAT AGING OF PLASTICS WITHOUT LOAD
124	ASTM D 3100-72	Part 36 Standard Method of Test for ALKALINITY OF HOLLOW GLASS MICROSPHERES
125	ASTM D 3101-72	Part 36 Standard Method of Test for BULK DENSITY AND PACKING FACTOR OF HOLLOW GLASS MICROSPHERES
126	ASTM D 3102-72	Part 36 Standard Method of Test for HYDROSTATIC COLLAPSE STRENGTH OF HOLLOW GLASS MICROSPHERES
127	ASTM D 3204-73	Part 15 Standard Specification for PREFORMED CELLULAR PLASTIC PRESSURE-RELIEF JOINT FILLERS
128	ASTM E 6-66 (1973)	Parts 10, 35 Standard Definitions of Terms Relating to METHODS OF MECHANICAL TESTING
129	ASTM E 29-67 (1973)	Part 35 Standard Recommended Practice for INDICATING WHICH PLACES OF FIGURES ARE TO BE CONSIDERED SIGNIFICANT IN SPECIFYING LIMITING VALUES

<u>Ref. No.</u>	<u>ASTM Specifications and Standards</u>	
130	ASTM E 84-75	Part 18 Standard Method of Test for SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS
131	ASTM E 96-66 (1972)	Parts 18, 35 Standard Methods of Test for WATER VAPOR TRANSMISSION OF MATERIALS IN SHEET FORM
132	ASTM E 111-61 (1972)	Part 10 Standard Method of Test for YOUNG'S MODULUS AT ROOM TEMPERATURE
133	ASTM E 119-75	Part 18 Standard Methods of FIRE TESTS OF BUILDING CONSTRUCTION AND MATERIALS (INCLUDING TENTATIVE REVISION)
134	ASTM E 143-61 (1972)	Part 10 Standard Method of Test for SHEAR MODULUS AT ROOM TEMPERATURE
135	ASTM E 162-75	Part 18 Standard Method of Test for SURFACE FLAMMABILITY OF MATERIALS USING A RADIANT HEAT ENERGY SOURCE
136	ASTM E 171-63 (1972)	Part 35 Standard Specification for STANDARD ATMOSPHERES FOR CONDITIONING AND TESTING MATERIALS
137	ASTM E 177-71	Part 35 Standard Recommended Practice for USE OF THE TERMS PRECISION AND ACCURACY AS APPLIED TO MEASUREMENT OF A PROPERTY OF A MATERIAL
138	ASTM G 21-70	Parts 35, 41 Standard Recommended Practice for DETERMINING RESISTANCE OF SYNTHETIC POLYMERIC MATERIALS TO FUNGI
139	ASTM G 22-67T	Parts 35, 41 Standard Recommended Practice for DETERMINING RESISTANCE OF PLASTICS TO BACTERIA
140	ASTM G 23-69	Parts 35, 41 Standard Recommended Practice for OPERATING LIGHT- AND WATER-EXPOSURE APPARATUS (CARBON-ARC TYPE) FOR EXPOSURE OF NONMETALLIC MATERIALS

Society of Automotive Engineers (SAE)

<u>Ref. No.</u>	<u>Aerospace Materials Specifications (AMS) (14 specs)</u>	
141	AMS 3193	SILICONE RUBBER SPONGE, CLOSED CELL - MEDIUM, EXTREME LOW TEMPERATURE, May 1, 1968
142	AMS 3194	SILICONE RUBBER SPONGE, CLOSED CELL, FIRM, EXTREME LOW TEMPERATURE, May 1, 1968
143	AMS 3195B	SILICONE RUBBER SPONGE, CLOSED CELL, MEDIUM, May 1, 1968
144	AMS 3196B	SILICONE RUBBER SPONGE, CLOSED CELL, FIRM, May 1, 1968
145	AMS 3197H	SPONGE, CHLOROPRENE-RUBBER, SOFT, Dec. 1, 1973
146	AMS 3198H	SPONGE, CHLOROPRENE-RUBBER, MEDIUM, Dec. 1, 1973
147	AMS 3199H	SPONGE, CHLOROPRENE RUBBER, FIRM, Dec. 1, 1973
148	AMS 3570A	POLYURETHANE FOAM, FLEXIBLE - OPEN CELL, MEDIUM FLEXIBILITY, 2.5 LB PER CU FT, July 15, 1963
149	AMS 3635A	PLASTIC SHEET - CELLULAR, SHOCK ABSORBING, CLOSED CELL, FOAMED, MODIFIED VINYL SHEET, June 3, 1960
150	AMS 3709	SYNTACTIC FOAM TILES, March 1, 1974
151	AMS 3730	POTTING COMPOUND - FOAMED EPOXY TYPE, AMINE HARDENED, Aug. 15, 1955
152	AMS 3851A	FIRE RESISTANT PROPERTIES FOR AIRCRAFT MATERIALS, Nov. 1, 1954
153	AMS 3852A	FLAME RESISTANT PROPERTIES FOR AIRCRAFT MATERIALS, Nov. 1, 1954
154	AMS 3912	RADOMES - FOAM SANDWICH, March 1, 1974

(To obtain copies of these documents contact the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096.)

SAE Recommended Practices (from 1976 SAE Handbook) (7 specs)

155	SAE J 15	FLEXIBLE FOAMS MADE FROM POLYMERS OR COPOLYMERS OF VINYL CHLORIDE, p. 12.24 (same as ASTM D 1565-58T, Sep. 1960, Ref. No. 85)
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<u>Ref. No.</u>	<u>SAE Recommended Practices</u>
156	SAE J 17a LATEX FOAM RUBBERS, p. 12.30 (conforms substantially to ASTM D 1055, Aug. 1971, Ref. No. 73)
157	SAE J 18b SPONGE- AND EXPANDED CELLULAR-RUBBER PRODUCTS, p. 12.33 (substantially same as ASTM D 1056, Dec. 1972, Ref. No. 74)
158	SAE J 369a FLAMMABILITY OF AUTOMOTIVE INTERIOR MATERIALS - HORIZONTAL TEST METHOD, p. 12.63, June 1972 (foams not discussed but probably covered)
159	SAE J 388 DYNAMIC FLEX FATIGUE TEST FOR SLAB POLYURETHANE FOAM, p. 34.28, March 1969
160	SAE J 815 LOAD DEFLECTION TESTING OF URETHANE FOAMS FOR AUTOMOTIVE SEATING, p. 34.31, March 1962
161	SAE J 954 URETHANE FOR AUTOMOTIVE SEATING, p. 34.30, June 1966

(To obtain copies of these documents or of the current SAE Handbook contact the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096.)

Underwriters Laboratories (UL) Standards (1 std)

162	UL 94	TESTS FOR FLAMMABILITY OF PLASTIC MATERIALS FOR PARTS IN DEVICES AND APPLIANCES, 2nd Edition, May 2, 1975 (In this Standard there is a Horizontal Burning Test for Classifying Foamed Materials 94 HBF, 94 HF-1 and 94 HF-2.)
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(To obtain copies of this Standard contact the Underwriters Laboratories, Inc., 2550 Dundee Road, Box 247, Northbrook, ILL 60062.)

National Fire Protection Association (NFPA) Standards (2 stds)

163	NFPA 205 M-T	TENTATIVE GUIDE FOR PLASTICS IN BUILDING CONSTRUCTION, May 1973
164	NFPA 231B	STANDARD FOR STORAGE OF CELLULAR RUBBER AND PLASTICS, 1974

(To obtain copies of these documents contact the National Fire Protection Association, Publications Dept., 470 Atlantic Avenue, Boston, MA 02210.)

U.S. GOVERNMENT SPECIFICATIONS AND STANDARDS

Military Specifications (58 specs)

Ref. No.	FSC Category/ Area ¹	Preparing Activity ¹	Issue Date	Coordination and QPL	
165	MIL-C-3133B(3)	9320	MR	28 Jan 71	
	CELLULAR ELASTOMERIC MATERIALS, FABRICATED PARTS				
166	MIL-R-5001A(4)	9320	AS	19 Sep 74	
	RUBBER CELLULAR SHEET, MOLDED AND HAND BUILT SHAPES: LATEX FOAM				
167	MIL-R-6130B(3)	9320	AS	28 May 71	
	RUBBER, CELLULAR, CHEMICALLY BLOWN				
168	MIL-C-8087C	9330	AS	24 Apr 68	
	CORE MATERIAL, FOAMED-IN-PLACE, URETHANE TYPE				
169	MIL-P-12420C	9330	GL	21 Dec 71	
	PLASTIC MATERIAL, CELLULAR				
170	MIL-I-13042A(AT) ¹	5640	AT	25 Mar 68	L
	INSULATION SLEEVING, THERMAL, TUBULAR, FLEXIBLE				
171	MIL-I-14511A(AT)	5640	AT	20 Oct 68	L
	INSULATION SHEET, CELLULAR PLASTIC: THERMAL				
172	MIL-P-15280G	9330	SH	24 May 74	
	PLASTIC MATERIAL, UNICELLULAR (SHEETS AND TUBES)				
173	MIL-F-16562(OS)	5640	OS	14 June 72	L
	INSULATION, SYNTHETIC, RUBBER-LIKE, CHEMICALLY EXPANDED, CELLULAR (SHEET FORM)				
174	MIL-C-17435B(1)	8135	OS	29 Oct 56	
	CUSHIONING MATERIAL, FIBROUS GLASS				
175	MIL-C-18345A	9330	AS	21 Nov 62	
	CORE MATERIAL, CELLULAR CELLULOSE ACETATE				
176	MIL-M-18351E(SHIPS)	7210	SH	4 Jan 72	L
	MATTRESS, BERTH, SYNTHETIC SPONGE RUBBER, NAVAL SHIPBOARD				
177	MIL-P-19644C	9330	OS	10 July 70	
	PLASTIC MOLDING MATERIAL (POLYSTYRENE FOAM, EXPANDED BEAD)				

¹ See Appendix for explanation of codes, symbols, etc.

Ref. No.	FSC Category/ Area	Preparing Activity	Issue Date	Coordination and QPL
178	MIL-R-20092H	9320 SH	20 June 74	
	RUBBER SHEETS AND MOLDED SHAPES, CELLULAR, SYNTHETIC OPEN CELL (FOAMED LATEX)			
179	MIL-P-21929B(1)	9330 SH	22 June 70	
	PLASTIC MATERIAL, CELLULAR POLYURETHANE FOAM IN PLACE, RIGID AND 4 POUNDS PER CUBIC FOOT			
180	MIL-C-23734(1) (AS)	8135 AS	29 June 66	L
	CUSHIONING MATERIAL, CELLULOSIC, TREATED, FREE FLOW, TUBULAR			
181	MIL-C-23806A(1) (EC)	6145 EC	17 Sep 70	L
	CABLE, RADIO FREQUENCY, COAXIAL, SEMIRIGID, FOAM DIELECTRIC, GENERAL SPECIFICATION			
182	MIL-C-23806/1B (EC)	6145 EC	17 Sep 70	L
	CABLE, RADIO FREQUENCY, COAXIAL, SEMIRIGID, FOAM DIELECTRIC, 1/2 INCH, 50 and 75 OHM (RE-332/U, RG-334/U and RG-335/U)			
183	MIL-C-23806/2B (EC)	6145 EC	23 June 69	L
	CABLE, RADIO FREQUENCY, COAXIAL, SEMIRIGID, FOAM DIELECTRIC, 7/8 INCH, 50 AND 75 OHM, (RG 332/U, RG 333/U, RG 336/U and RG 306A/U)			
184	MIL-C-23806/3B (EC)	6145 EC	23 June 69	L
	CABLE, RADIO FREQUENCY, COAXIAL, SEMIRIGID, FOAM DIELECTRIC, 3/4 INCH, 50 OHM, JACKETED (RG-360/U)			
185	MIL-S-24154A(1) (SHIPS)	9330 SH	28 Mar 67	QL
	SYNTACTIC BUOYANCY MATERIAL FOR HIGH HYDROSTATIC PRESSURES			
186	MIL-S-24167A (SHIPS)	9330 SH	6 Dec 72	L
	SYNTACTIC MATERIAL, RIGID, POUR-IN-PLACE, STRUCTURAL VOID FILLING			
187	MIL-I-24172(1) (SHIPS)	5640 SH	12 May 67	L
	INSULATION, PLASTIC, CELLULAR POLYURETHANE, RIGID, PREFORMED AND FOAMED IN PLACE			
188	MIL-A-24179A(1) (SHIPS)	8040 SH	11 July 69	QL
	ADHESIVE, FLEXIBLE UNICELLULAR - PLASTIC THERMAL INSULATION			
189	MIL-P-24249(1) (SHIPS)	9330 SH	6 Nov 67	NQL
	PLASTIC MATERIAL, CELLULAR POLYURETHANE, RIGID, VOID FILLER, POUR-IN-PLACE, LARGE SCALE AND INSTALLATION OF			

Ref. No.		FSC		Issue Date	Coordination and OPL
		Category/ Area	Preparing Activity		
190	MIL-P-24333(2) (SHIPS) PLASTIC MATERIAL, UNICELLULAR, SHEET, ELASTOMERIC	9330	SH	17 June 70	L
191	MIL-S-25392B SANDWICH CONSTRUCTION, PLASTIC RESIN, GLASS FABRIC BASE, LAMINATED FACINGS AND POLYURETHANE FOAMED IN PLACE CORE, FOR AIRCRAFT STRUCTURAL APPLICATIONS	9330	AS	8 May 68	
192	MIL-P-26514D(2) POLYURETHANE FOAM, RIGID OR FLEXIBLE, FOR PACKAGING	8135	69	25 Aug 75	
193	MIL-C-26861B(1) CUSHIONING MATERIAL, RESILIENT TYPE, GENERAL	8135	69	14 Mar 74	
194	MIL-S-27332A(USAF) SEAT CUSHION INSERT, POLYURETHANE FOAM, GENERAL SPECIFICATION FOR	1660	11	12 Jan 66	L
195	MIL-C-38226A(1) (USAF) CONTAINER, POLYURETHANE, RIGID OR ELASTIC FOR PACKAGING SMALL ENGINES	8115	69	7 May 74	L
196	MIL-S-38639A(1) (USAF) SHIPPING AND STORAGE CONTAINER, BOMB, CNU-109/E, RIGID POLYURETHANE, POUR-IN-PLACE FOR PACKAGING BOMBS, CHEMICAL, BLU-52/B	8140	70	13 Jan 69	L
197	MIL-P-40619A PLASTIC MATERIAL, CELLULAR, POLYSTYRENE (FOR BUOYANCY APPLICATIONS)	9330	SH	9 Dec 68	
198	MIL-P-43110B(AT) PLASTIC FOAM INSULATION, THERMAL (POLYURETHANE)	5640	AT	20 June 73	L
199	MIL-P-43226(MI) POLYETHER CUSHIONING MATERIAL, FOAM-IN-PLACE, FLEXIBLE	8135	MI	22 Apr 64	L
200	MIL-R-46089A(MI) RUBBER, SPONGE, SILICONE, CLOSED CELL	9320	MI	9 Mar 73	L
201	MIL-P-46111B(MR) PLASTIC FOAM, POLYURETHANE (FOR USE IN AIRCRAFT)	9330	MR	29 Nov 73	L
202	MIL-T-46151 TAPE, PRESSURE-SENSITIVE ADHESIVE, POLYURETHANE FOAM	9320	MR	16 Oct 70	
203	MIL-T-46586B(MU) TUBE, IGNITER FOR CHARGE, PROPELLING, 175MM, M86A2 (CELLULAR POLYURETHANE)	1320	PA	29 Feb 68	L

Ref. No.	FSC Category/	Preparing Area	Activity	Issue Date	Coordination and QPL
204	MIL-P-46847A(1) (MI)	9330	MI	6 May 69	L
	PLASTIC MATERIAL, FOAMED POLYURETHANE FOR ENCAPSULATING ELECTRONIC COMPONENTS				
205	MIL-I-46882 (MI)	5970	MI	14 Dec 73	L
	INSULATION SHEET AND STRIP, CELLULAR, ELASTOMERIC				
206	MIL-P-46897 (MI)	9330	MI	14 Dec 73	L
	POLYURETHANE FOAM				
207	MIL-F-47095A (MI)	5970	MI	24 Sep 74	L
	FOAM, POLYURETHANE, FOR IMBEDDING ELECTRONIC COMPONENTS AND BOARDS				
208	MIL-P-47099 (MI)	5970	MI	24 May 74	L
	POLYURETHANE FOAM, RIGID, FOR PACKAGING AND ENCAPSULATION OF ELECTRONIC COMPONENTS				
209	MIL-I-47149 (MI)	5640	MI	7 June 74	L
	INSULATION MATERIAL (SOUND AND VIBRATION BARRIER)				
210	MIL-F-47222 (MI)	9330	MI	12 July 74	L
	FOAM, POLYURETHANE, RIGID				
211	MIL-F-47254 (MI)	9330	MI	26 July 74	L
	FOAM, POLYURETHANE, OPEN CELL, MEDIUM FLEXIBILITY				
212	MIL-F-47285 (MI)	9330	MI	9 Aug 74	L
	FOAM, POLYURETHANE, RIGID				
213	MIL-F-52236 (CE)	4220	ME	21 Aug 62	L
	FILTER ELEMENT, AIR, DIVER'S: POLYURETHANE FOAM				
214	MIL-P-60312B(2) (MU)	8140	PA	27 Aug 73	L
	PARTS, MOLDED, PLASTIC FOAM, POLYSTYRENE (FOR USE WITH AMMUNITION)				
215	MIL-T-60394A(1) (MU)	1375	PA	7 May 68	L
	TAPE, PRESSURE-SENSITIVE FILM FOAM, DOUBLE-COATED (FOR USE WITH AMMUNITION)				
216	MIL-F-81254 (WP)	1338	OS	15 Apr 65	L
	FOAM, URETHANE				
217	MIL-M-81288(1) (AS)	5340	AS	15 July 68	L
	MOUNTING BASES, FLEXIBLE PLASTIC FOAM				

Ref. No.	FSC Category/ Area	Preparing Activity	Issue Date	Coordination and QPL	
218	MIL-F-81334A(AS)	5340	AS	1 May 69	L
	FOAM, PLASTIC, FLEXIBLE, OPEN CELL, POLYESTER TYPE, POLYURETHANE				
219	MIL-B-83054A(1) (USAF)	9330	11	27 June 75	L
	BAFFLE MATERIAL, AIRCRAFT FUEL TANK				
220	MIL-P-83379(1) (USAF)	9330	11	14 Apr 75	L
	PLASTIC MATERIAL, CELLULAR POLYURETHANE, FOAM-IN-PLACE, RIGID (3 POUNDS PER CUBIC FOOT DENSITY)				
221	MIL-C-83400(USAF)	5410	11	29 Nov 72	L
	CORE MATERIAL FOR METAL SANDWICH PANELS FOR SHELTER CONSTRUCTION (POLYURETHANE FOAM)				
222	MIL-F-????	PACK	SM	Currently under	
	PROCEDURES FOR FOAM-IN-PLACE PACKAGING				coordination

Military Standards (4 stds)

223	MIL-STD-401B	5680	AS	26 Sep 67	
	SANDWICH CONSTRUCTIONS AND CORE MATERIALS; GENERAL TEST METHODS				
224	MIL-STD-670B	9320	MR	30 Jan 68	
	CLASSIFICATION SYSTEM AND TESTS FOR CELLULAR ELASTOMERIC MATERIALS				
225	MIL-STD-768A	MISC	AS	11 Sep 70	
	INSTRUCTIONS FOR REPAIR OF AIRCRAFT AND WEAPONS REINFORCED PLASTIC AND SANDWICH STRUCTURES - PART 1, ALL PLASTIC CONSTRUCTION				
226	MIL-STD-1186	PACK	ME	28 Oct 63	
	CUSHIONING, ANCHORING, BRACING, BLOCKING AND WATERPROOFING; WITH APPROPRIATE TEST METHODS				

Military Handbooks (3 hdbks)

227	MIL-HDBK-139(MU)	9330	PA	30 Jan 67	L
	PLASTIC, PROCESSING OF				
228	MIL-HDBK-304A	PACK	PA	25 Sep 74	
	PACKAGE CUSHIONING DESIGN				
229	MIL-HDBK-768(SM)	PACK	SM	15 Jan 73	L
	RIGID POLYURETHANE FOAM PACKAGING DESIGN				

Federal Specifications (33 specs)

Ref. No.	Category/ Area	Preparing Activity	Issue Date	Coordination and QPL
230	L-C-001369(GSA-FSS)	7220 FSS	10 Dec 69	CUSHION, CARPET AND RUG, BONDED URETHANE
231	L-C-00167(GSA-FSS)	7220 FSS	7 Sep 71	CUSHION, CARPET AND RUG, VIRGIN URETHANE
232	L-P-386B	9330 FSS	25 May 73	INT AMEND 1 PLASTIC MATERIAL, CELLULAR, URETHANE (FLEXIBLE)
233	L-S-626C	7920 GL	13 Sep 67	INT AMEND 1 (ARMY-GL) SPONGES, SYNTHETIC
234	L-S-00626D(GSA-FSS)	7920 FSS	15 Jan 70	SPONGES, SYNTHETIC
235	AA-C-00275D(3)	7110 FSS	21 Feb 74	(GSA-FSS) CHAIRS, ROTARY AND STRAIGHT, ALUMINUM, OFFICE
236	HH-I-524B	5640 YD	6 Nov 72	INSULATION BOARD, THERMAL (POLYSTYRENE)
237	HH-I-530A	5640 YD	18 Dec 75	INT AMEND 2 (YD) INSULATION BOARD, THERMAL (URETHANE)
238	HH-I-550A	5640 ME	20 Mar 67	INSULATION SLEEVING, THERMAL (URETHANE)
239	HH-I-573B	5640 ME	20 Feb 68	INSULATION, THERMAL (FLEXIBLE UNICELLULAR SHEET AND PIPE COVERING)
240	HH-I-1751/GEN	5640 ME	20 July 73	INSULATION SLEEVING, THERMAL (PIPE AND TUBE COVERING)
241	HH-I-1751/2	5640 ME	27 July 73	INSULATION SLEEVING, THERMAL (FLEXIBLE UNICELLULAR PIPE COVERING)
242	HH-I-1751/3A	5640 ME	10 Oct 73	INSULATION SLEEVING, THERMAL, PIPE COVERING (CELLULAR GLASS)
243	HH-I-1751/4	5640 ME	6 Aug 73	INSULATION SLEEVING, THERMAL, PIPE COVERING (URETHANE)

Ref. No.	FSC Category/ Area	Preparing Activity	Issue Date	Coordination and OPL
244	ZZ-C-758	6515	DM	17 June 46
	CUSHIONS, ARM, SPONGE RUBBER, FOR CRUTCHES			
245	ZZ-C-00766C(GSA-FSS)	7210	FSS	12 May 71
	CUSHIONS, CHAIR AND STOOL			
246	ZZ-C-811(1)	7220	FSS	29 Nov 45
	CUSHION (UNDERLAY), CARPET AND RUG, SPONGE RUBBER AND SYNTHETIC RUBBER			
247	ZZ-C-00811B(COM-NBS)	7220	FSS	2 Jan 63
	CUSHION, CARPET AND RUG, CELLULAR RUBBER			
248	ZZ-M-91E	7210	GL	20 Mar 68
	INT AMEND 1 (GSA-FSS) MATTRESS, BED, LATEX FOAM			
249	ZZ-P-75B(1)	7510	FSS	16 Feb 72
	PAD, TYPEWRITER, SPONGE RUBBER			
250	ZZ-P-00355(1)	7210	FSS	15 Feb 66
	PILLOW, BED, (LATEX FOAM)			
251	ZZ-P-001235(2)	7210	FSS	18 Apr 75
	PILLOW, BED (FLAKED URETHANE)			
252	LLL-I-535A(2)	5640	YD	10 June 75
	INSULATION BOARD, THERMAL AND INSULATION BLOCK, THERMAL			
253	PPP-C-795A	8135	GL	2 Dec 70
	CUSHIONING MATERIAL, FLEXIBLE, CELLULAR, PLASTIC FILM FOR PACKAGING APPLICATION			
254	PPP-C-843C	8135	GL	15 Feb 73
	CUSHIONING MATERIAL, CELLULOSIC			
255	PPP-C-850D(1)	8135	MR	18 July 72
	INT AMEND 4 CUSHIONING MATERIAL, POLYSTYRENE EXPANDED, RESILIENT (FOR PACKAGING USES)			
256	PPP-C-1120(2)	8135	69	16 Feb 73
	INT AMEND 4 (USAF) CUSHIONING MATERIAL, UNCOMPRESSED BOUND FIBER FOR PACKAGING			

Ref. No.	FSC Category/ Area	Preparing Activity	Issue Date	Coordination and OPL
257	PPP-C-1266B	8115	DM	30 May 73
	INT AMEND 1 (DSA-DM) CONTAINER, THERMAL, SHIPPING, FOR MEDICAL MATERIAL REQUIRING CONTROLLED TEMPERATURE RANGES			
258	PPP-C-1683(1)	8135	69	10 Oct 73
	CUSHIONING MATERIAL, EXPANDED POLYSTYRENE LOOSE FILL BULK (FOR PACKAGING APPLICATION)			
259	PPP-C-1752A(1)	8135	69	18 June 75
	CUSHIONING MATERIAL, PACKAGING, UNICELLULAR POLYETHYLENE FOAM			
260	PPP-C-1797(2)	8135	AS	3 Sep 75
	CUSHIONING MATERIAL, RESILIENT, LOW DENSITY, UNICELLULAR POLYPROPYLENE FOAM			
261	PPP-C-1842A(1)	8135	GL	29 Dec 75
	INT AMEND 2 CUSHIONING MATERIAL, PLASTIC, OPEN CELL (FOR PACKAGING APPLICATIONS)			
262	PPP-T-1835	8135	GL	19 Oct 73
	TRAYS, PLASTIC, FOAM AND CLEAR			

Federal Test Method Standards (4 stds - 21 methods)

FED TEST METHOD STD

No. 101B PACK AS 25 Apr 75
CHG NOT 3
PRESERVATION, PACKAGING AND PACKING MATERIALS: TEST PROCEDURES

263	Method 2013	CREEP PROPERTIES OF PACKAGE CUSHIONING MATERIALS UNDER COMPRESSION, 15 Jan 69
264	Method 2028	LOAD DEFLECTION CHARACTERISTICS OF RESILIENT CUSHIONING MATERIALS (STATIC INDENTATION METHOD), 15 Jan 69
265	Method 4035	WATER ABSORPTION BY CUSHIONING MATERIALS, 15 Jan 69
266	Method 4043	THERMAL CONDUCTIVITY OF CUSHIONING MATERIALS, 15 Jan 69

FED TEST METHOD STD

No. 191 8300 GL 17 July 74
CHG NOT 5
TEXTILE TEST METHODS

267	Method 5903.2	FLAME RESISTANCE OF CLOTH; VERTICAL (used for foam products also), 9 July 71
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Ref. No.	FSC		Coordination and QPL
	Category/ Area	Preparing Activity	

268 FED TEST METHOD STD

No. 406 9330 SH 5 Oct 61

PLASTICS: METHODS OF TESTING

Note: There are 77 Methods in this Standard. None are known to be applicable only to cellular plastics, but quite probably some of these Methods can be used with cellular plastics. For this reason the Standard is listed.

FED TEST METHOD STD

No. 601 9320 MR 29 Aug 72

CHG NOT 6

RUBBER: SAMPLING AND TESTING

- | | | |
|-----|--------------|---|
| 269 | Method 12001 | CELLULAR RUBBER, GENERAL, 12 Apr 55 |
| 270 | Method 12005 | GEOMETRICAL MEASUREMENTS, CELLULAR RUBBER, GENERAL, 12 Apr 55 |
| 271 | Method 12011 | LENGTH, CELLULAR RUBBER, 12 Apr 55 |
| 272 | Method 12021 | WIDTH, CELLULAR RUBBER, 12 Apr 55 |
| 273 | Method 12031 | THICKNESS, CELLULAR RUBBER, 12 Apr 55 |
| 274 | Method 12041 | DIAMETER, CELLULAR RUBBER, 12 Apr 55 |
| 275 | Method 12111 | FLEXING ENDURANCE, CELLULAR RUBBER, 12 Apr 55 |
| 276 | Method 12121 | INDENTATION, CELLULAR RUBBER, 12 Apr 55 |
| 277 | Method 12131 | COMPRESSION SET, CELLULAR RUBBER, 12 Apr 55 |
| 278 | Method 12141 | COMPRESSION RESISTANCE, CELLULAR RUBBER, 12 Apr 55 |
| 279 | Method 12151 | COMPRESSION DEFLECTION, CELLULAR RUBBER, 12 Apr 55 |
| 280 | Method 12211 | AIR HEAT TEST, CELLULAR RUBBER, 12 Apr 55 |
| 281 | Method 12231 | AIR PRESSURE TEST, CELLULAR RUBBER, 12 Apr 55 |
| 282 | Method 12311 | OIL IMMERSION TEST, CELLULAR RUBBER, 12 Apr 55 |
| 283 | Method 12411 | WATER ABSORPTION, CELLULAR RUBBER, 12 Apr 55 |

U.S. Dept. of Commerce, National Bureau of Standards, Office of Engineering Standards, Washington, D.C. 20234 (3 stds)

Voluntary Product Standards*

284 PS 13-69 UNCORED SLAB URETHANE FOAM FOR BEDDING AND FURNITURE CUSHIONING, Dec 69

285 PS 63-75 LATEX FOAM MATTRESSES FOR HOSPITALS, Apr 75

Simplified Practice Recommendations*

286 R 2-62 BEDDING PRODUCTS AND COMPONENTS (MATTRESSES, SPRINGS, BEDSTEADS AND COTS), 1962

* These are really industry standards developed with the assistance of the National Bureau of Standards and issued by that agency.

APPENDIX

Federal Supply Classification (FSC) Groups and Classes and DoD Area Assignments¹

¹ From Cataloging Handbook, H2-1, Federal Supply Classification, Part 1, Groups and Classes, January 1975, Defense Supply Agency

Group 13 Ammunition and Explosives

- FSC 1320 Ammunition, over 125 mm
- FSC 1338 Guided Missile and Space Vehicle Inert Propulsion Units, Solid Fuel; and Components
- FSC 1375 Demolition Materials

Group 16 Aircraft Components and Accessories

- FSC 1660 Aircraft Air Conditioning, Heating, and Pressurizing Equipment

Group 42 Fire Fighting, Rescue and Safety Equipment

- FSC 4220 Marine Lifesaving and Diving Equipment

Group 54 Prefabricated Structures and Scaffolding

- FSC 5410 Prefabricated and Portable Buildings (includes Prefabricated Panels)

Group 56 Construction and Building Materials

- FSC 5640 Wallboard, Building Paper, and Thermal Insulation Materials
- FSC 5680 Miscellaneous Construction Materials

Group 59 Electrical and Electronic Equipment Components

- FSC 5970 Electrical Insulators and Insulating Materials

Group 61 Electric Wire, and Power Distribution Equipment

- FSC 6145 Wire and Cable, Electrical

Group 65 Medical, Dental, and Veterinary Equipment and Supplies

- FSC 6575 Medical and Surgical Instruments, Equipment and Supplies

Group 71 Furniture

- FSC 7110 Office Furniture

Group 72 Household and Commercial Furnishings and Appliances

- FSC 7210 Household Furnishings
- FSC 7220 Floor Coverings

Group 75 Office Supplies and Devices

- FSC 7510 Office Supplies

Group 79 Cleaning Equipment and Supplies

FSC 7920 Brooms, Brushes, Mops and Sponges

Group 80 Brushes, Paints, Sealers, and Adhesives

FSC 8040 Adhesives

Group 81 Containers, Packaging, and Packing Supplies

FSC 8115 Boxes, Cartons and Crates

FSC 8135 Packaging and Packing Bulk Materials

FSC 8140 Ammunition and Nuclear Ordnance Boxes, Packages and Special Containers

Group 93 Nonmetallic Fabricated Materials

FSC 9320 Rubber Fabricated Materials

FSC 9330 Plastics Fabricated Materials

DoD Area Assignments (used in lieu of FSC Classification where an FSC class is not applicable)

MISC Miscellaneous

PACK Packaging

Preparing Activities¹

¹ More detailed addresses, telephone numbers, etc. can be found in the DOD Standardization Directory, FSC Class and Area Assignments, SD-1, issued quarterly by the Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, PA 19120. Similar information, but without the telephone numbers, is available in the Department of Defense Index of Specifications and Standards (DODISS), Part II, Numerical Listing. The DODISS, published periodically, is available to private industry and Government civil agencies through the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Military agencies can obtain copies from the Naval Publications and Forms Center directly, or through military channels.

AS - Naval Air Systems Command, Washington, DC

AT - U.S. Army Tank Automotive Command, Warren, MI

DM - Defense Personnel Support Center, Directory of Medical Materiel, Philadelphia, PA

EC - Naval Electronic Systems Command, Washington, DC

FSS- General Services Administration (GSA), Federal Supply Service Washington, DC

GL - U.S. Army Natick Research and Development Command, (formerly Natick Laboratories), Natick, MA

ME - U.S. Army Mobility Equipment Research and Development Center,
 Ft. Belvoir, VA
 MI - U.S. Army Missile Command, Redstone Arsenal, ALA
 MR - U.S. Army Materials and Mechanics Research Center, Watertown, MA
 MU - Frankford Arsenal, Philadelphia, PA
 OS - Naval Sea Systems Command (Ordnance Systems), Washington, DC
 PA - Picatinny Arsenal, Dover, NJ
 SH - Naval Sea Systems Command (Naval Ship Engineering Center),
 Hyattsville, MD
 SM - U.S. Army Packaging, Storage and Containerization Center,
 Tobyhanna Army Depot, Tobyhanna, PA
 YD - Naval Facilities Engineering Command, Alexandria, VA
 11 - Aeronautical Systems Division, Wright-Patterson Air Force Base, OH
 69 - Directorate of Packaging, Air Force Logistics Command,
 Wright-Patterson Air Force Base, OH
 70 - Ogden Air Logistics Center, Air Force Logistics Command, Hill Air
 Force Base, UT

Coordination and QPL

The symbol "L" means that the document has limited coordination, by one Service only. For example, in Ref. No. 176, the specification was prepared by the Naval Sea Systems Command, Naval Ship Engineering Center, for exclusive Navy use. It was not circulated to the Army, Air Force, or Civil Agencies for their comments and acceptance. Usually these limited coordination documents have symbols representing the preparing activity in parentheses immediately following the specification number. In this case, SHIPS is actually spelled out. In some cases, for Air Force limited coordination documents, the letters USAF are used. In others the official symbols (see Preparing Activities in this Appendix) are used.

The symbol "Q" means that a Qualified Products List of approved sources has been published. The symbol "NQ" means that such a list is planned but not yet issued.

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(in terms of Reference Numbers)

(Note: With a few exceptions, this index has been prepared only from the titles of the Standardization documents cited.)

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32	The Weatherability of Polyolefins, by J.B. Titus, March 1968 (Price \$6.00)	AD 672 513
33	Compatibility of Explosives with Polymers (II) (An Addendum to Picatinny Arsenal Technical Report 2595), by N.E. Beach and V.K. Canfield, April 1968 (Price \$6.00)	AD 672 861
34	Survey of Plastics Sandwich Construction, by N.T. Baldanza, May 1968 (Price \$6.00)	AD 673 713
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R37A	Ecological Disposal of Plastics with Emphasis on Foam-in-place Polyurethane Foam, by A.H. Landrock, Aug 1973 (Price \$10.00)	AD 771 342
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N6C	Government Specifications and Standards for Plastics Covering Defense Engineering Materials and Applications (Revised, Final), by N.E. Beach, May 1973 (Price \$3.00)	AD 771 008
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